28. An optical film for use with an edge illuminated lightguide having an input edge surface and an output surface, the optical film comprising:

a first surface;

a second surface opposing the first surface;

a plurality of prism grooves formed in the first surface, the prism grooves each having a groove axis and each groove axis being substantially parallel to each other groove axis, wherein the groove axes are arranged to be disposed substantially perpendicular to the input edge surface; and

each of the plurality of prism grooves being formed to include a plurality of optical structures, the plurality of optical structures to provide optical power to the prism groove, each optical structure having a characteristic, and the characteristic varying as a function of the location along the groove axis from the input edge surface.

29. The optical film of claim 28, wherein the characteristic comprises one of the group of characteristics comprising: amplitude, pitch and aspect ratio.

30. The optical film of claim 28, wherein the optical structures comprise optical structures selected from the group of optical structures comprising: prisms, lines, dots, squares and ellipses.

31. The optical film of claim 28, wherein the characteristic comprises amplitude, and wherein the amplitude varies along the groove axis.

32. The optical film of claim 28, wherein variation in the optical structures of adjacent prism grooves is one of in-phase and out-of-phase.

33. The optical film of claim 28, wherein the optical power is arranged to be greater along the groove axis at a location arranged to be nearer the input edge surface.

34. The optical film of claim 28, wherein the optical structures comprise discrete optical structures formed in the prism groove.

35. The optical film of claim 28, wherein the optical structures comprise continuous structures formed along the length of the prism groove.

36. The optical film of claim 28, wherein the optical power tapers from a first value to a second, lesser than the first value along the groove axis from a location on the groove axis arranged to be nearer the input edge to a location on the groove axis arranged to be farther from the input edge.

37. An optical film comprising a surface, a first edge and an opposing second edge, grooves formed in the surface extending from the first edge to the second edge, each groove having a groove axis and the groove axes being substantially aligned, optical structures formed on each of the grooves, the optical structures providing optical power to the grooves, and the optical structures having a characteristic that varies along the groove as a function of the location of the optical structure on the groove between the first edge and the second edge.

38. The optical film of claim 37, wherein the characteristic comprises one of the group of characteristics comprising: amplitude, pitch and aspect ratio.

39. The optical film of claim 37, wherein the optical structures comprise optical structures selected from the group of optical structures comprising: prisms, lines, dots, squares and ellipses.

40. The optical film of claim 37, wherein the characteristic comprises amplitude, and wherein the amplitude varies along the groove axis.

41. The optical film of claim 37, wherein variation in the optical structures of adjacent prism grooves is one of in-phase and out-of-phase.

42. The optical film of claim 37, wherein the optical power is arranged to be greater along the groove axis at a location arranged to be nearer the input edge surface.

43. The optical film of claim 37, wherein the optical structures comprise discrete optical structures formed in the prism groove.

44. The optical film of claim 37, wherein the optical structures comprise continuous structures formed along the length of the prism groove.

45. The optical film of claim 37, wherein the optical power tapers from a first value to a second, lesser than the first value along the groove axis from a location on the

groove axis arranged to be nearer the input edge to a location on the groove axis arranged to be farther from the input edge.

46. A lightguide comprising an input edge and a second edge opposing the input edge and a surface, grooves formed in the surface extending from the input edge to the second edge, each groove having a groove axis and the groove axes being substantially aligned, optical structures formed on each of the grooves, the optical structures providing optical power to the grooves, and the optical structures having a characteristic that varies along the groove as a function of the location of the optical structure on the groove between the input edge and the second edge.

47. A method of reducing defects in a light output of a backlight, the method comprising:

providing an optical element in the back light system, the optical element having a surface, a first edge and an opposing second edge, grooves formed in the surface extending from the first edge to the second edge, each groove having a groove axis and the groove axes being substantially aligned, optical structures formed on each of the grooves, the optical structures providing optical power to the grooves, and the optical structures having a characteristic that varies along the groove as a function of the location of the optical structure on the groove between the input edge and the second edge; and

arranging the optical element such that the grooves are aligned substantially perpendicular to a light source of the backlight and in an output path of the light source.